

**Work Order ID 66970**

Thursday, March 03, 2011 9:00:38 AM



Page 1

Item ID: D2622-120C

Accept



Setup Start



Revision ID:

Stop



Item Name: Step Extrusion

120

Start Date: 3/3/2011 Start Qty: 110.00

Cust Item ID:

Required Date: 3/31/2011 Req'd Qty: 110.00

Customer:

Reference:

Approvals:

Process Plan: CLDate: 11/03/03

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2622

Rev C1

100

0.00



PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 13593 ☐a) Extrude as per Dwg D2622 Rev. C ☐b)  
Material: 6061-T6 (QQ-A-200/8) ☐c) Minimum yield tensile strength = 35  
ksi ☐d) Minimum ultimate tensile strength = 38 ksi ☐e) Minimum elongation =  
8% ☐f) Order at 120" longg) Bon L Canada Inc.

CL11/03/03120

110

0.00



Receive &amp; Inspect for Damage &amp; Mat'l Certs

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

12/4/11126

120

0.00



QC6- Inspect dimensions to drawing

QC

Memo

0.00

Quality Control

Check Pull test per Dwg D2622 for compliance page attached Check hardness  
with Webster tester

8/10/12126

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 66970**

Thursday, March 03, 2011 9:00:38 AM

Page 2

Item ID: D2622-120C

Accept

Setup Start

Revision ID:

Stop

Item Name: Step Extrusion

Start Date: 3/3/2011 Start Qty: 110.00

Required Date: 3/31/2011 Req'd Qty: 110.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool # Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

Identify as per dwg & Stock Location: WA=81 0.00

Packaging

Memo

HALLWAY = 45 0.0011-04-12126φ

Packaging

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/4/1311-04-13  
124

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, March 03, 2011 9:00:34 AM

Page 1

Work Order ID: 66970



Parent Item: D2622-120C



Parent Item Name: Step Extrusion



Start Date: 3/3/2011

Required Date: 3/31/2011

Start Qty: 110.00

Required Qty: 110.00

## Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120CP  Extrusion		Purchased	No			110	Each	0.0000	1 	110		6/4/7	(126)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

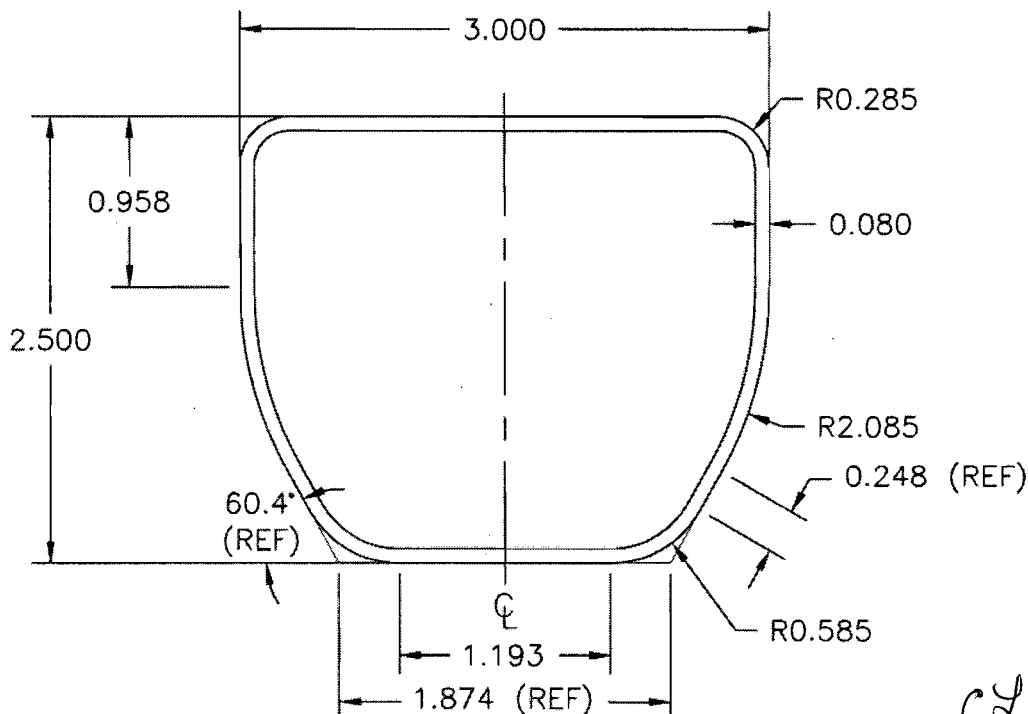
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN KE	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2622	REV. C SHEET 1 OF 1
DATE 02.09.11		TITLE STEP EXTRUSION	SCALE 1:1
A	96.11.29	NEW ISSUE	
B	97.12.12	CHANGE MATERIAL, ADD TOL. QSI	
C	02.09.11	0.080 WAS 0.085; ADD PART & DIE No.	
CI	CP 02.10.04	ADD 'REV. A' TO DIE NUMBER.	

RELEASED  
02.09.11



CL11103/03

#### D2622-XXX STEP EXTRUSION

- 1) PART NUMBER IS D2622-XXX WHERE 'XXX' IS CUT LENGTH IN INCHES W/O: 66970  
(EG. D2622-120 IS 120" LONG)
- 2) MATERIAL 6061-T6 (QQ-A-200/8)
- 3) MANUFACTURED USING BON-L DIE # 897123 REV. A
- 4) A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi  
MINIMUM ELONGATION = 8%

- 5) PART IS SYMMETRIC ABOUT CENTERLINE
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO13593**

Purchase Order Date 3/3/2011

PO Print Date 3/3/2011

Page Number 1 of 2

Order From :

VC-BON001

SIGNATURE ALUMINUM  
1850 CLEMENTS ROAD  
PICKERING, ON L1W 3R8  
CA

Contact Name

Vendor Phone

800 563 1079

Vendor Fax

800 565 8339

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAKED**  
C2116303

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2600-3-120P	Extrusion Round 3" 350	4/4/2011 Yes	80.00 Each	Yours ppd	\$47.0220	\$3,761.76
		<b>Special Inst:</b> EXTRUDE AS PER DWG D2600 REV. D1 B66973 MATERIAL: 6061-T6 AS PER (QQ-A- 200/8) MINIMUM YIELD TENSILE STRENGTH = 35 KSI MINIMUM ULTIMATE STRENGTH = 40 KSI MINIMUM ELONGATION = 8% 120 " LONG SIGNATURE TOOL DIE # 897122					
2	D2622-120CP	Extrusion	4/4/2011 Yes	120.00 Each	Yours ppd	\$27.0660	\$3,247.92

*McC*

Change Nbr: 1

Change Date: 3/3/2011

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable





ACCT# 46024

## INVOICING AND COMPANY LOCATION

SIGNATURE ALUMINUM CANADA  
1850 CLEMENTS ROAD  
PICKERING ON L1W 3R8

## SHIPPING MANIFEST

MANIFEST DATE / DATE DU BODEREAU  
04-05-11MANIFEST NUMBER / N° DE BODEREAU  
000506SALES ORDER NUMBER / N° DE COM  
69112

## SHIP TO / EXPÉDIÉ À

DART AEROSPACE LTD.  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
CANADA

PHONE: 613-632-5200

## SOLD TO / VENDUE À

DART AEROSPACE LTD.  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
CANADA

PHONE: 613-632-5200

TERMS / FREIGHT

PP

REFER TO  
THESE NUMBERS ON  
ALL CORRESPONDANCEREFEREZ-VOUS A CES  
NUMEROUS POUR TOUTE  
CORRESPONDANCE

PHONE: 613-632-5200			PHONE: 613-632-5200			LOCATION	TRAILER NUMBER / REMORQUE Nombre	SALESMAN / VENDEUR	CREDIT REP / REP DU CRÉDIT	SALES REP / REP. DES VENTES	
						PIC	GOLDEN	138		M. BATES	
CUSTOMER ID / ID DU CLIENT		ORDER DATE / DE LA COM		CUSTOMER PO NUMBER / CLIENT PO Nombre			JOB / FICHIER		FIELD SALES REP / REP REGIONAL DES VENTES		CUST SERVICE REP / REP. SERVICE CLIENTELE
46024		03/03/11		13593					M. BATES		DLB
				BILL OF LADING NUMBER / NO. DE CONNAISSEMENT			CARRIER / TRANSPORTEUR				
				000506			GOLDEN				
ITEM NO. / NUMÉRO	ORIGINAL ORDER QUANTITY / Quantité d'ordre ORIGINAL	UNIT / UNITÉ	PREVIOUS SHIPPED QUANTITY / PRÉCÉDENT Quantité livrée	MFG. PART NUMBER / MFG. PARTIE NUMÉRO	ALLOY & TEMPER / ALLIAGE & TEMPER	FINISH DESCRIPTION / DESCRIPTION DE FINITION	NBR OF PKGS / NBR DE PKGS	GROSS LBS / LIVRES BRUT	NET QUANTITY / QUANTITÉ NETTE	UNIT / UNITÉ	QUANTITY DUE / Quantité en raison
				CUSTOMER PART NUMBER / NUMÉRO DE RÉFÉRENCE DU CLIENT	LENGTH / LONGUEUR	FABRICATION DESCRIPTION / DESCRIPTION DE FABRICATION					
					CUTTING TOLERANCE / Tolérance de coupe	SHIPPING TOLERANCE / EXPÉDITION TOLERANCE					
002	1,104	LB		DAA-897123-1	6061		2	1,177	1,146	LB	
	501	KG		D2622				534	520	KG	
	121	PC				Min: 0 %    Max: 0 %			126	PC	
						800693 / 103017	1	589	573		63 PC
						800693 / 103018	1	589	573		63 PC

126

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.  
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

CUSTOMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

Page 2

DATE OF DELIVERY

DRIVER

4	2,560	2,498	LB
	1,161	1,133	KG
		210	PC
TOTALS			



**SIGNATURE ALUMINUM CANADA**1850 CLEMENTS RD  
PICKERING, ON L1W 3R8**CERTIFICATE OF COMPLIANCE**

Cert Date	Cert No	Sales Order	Page
04/05/2011	5257945	69112	1
Cust PO	B/L No	Lot	Date
13593	000506	800693	04/05/11

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA

Item No	Part No	Item Description	Cust Part
002	DAA-897123-1	DIE REV. A	D2622
Gross Weight	1,177 LBS		
Net Qty	1,146 LBS	126 PCS	2 PKGS
Specification	AMS-QQ-A-200/8 & ASTM B221-08		

**Mechanical Tests:**

Tensile	Yield	% Elongation	Conductivity	HREW
MPA / KSI	MPA / KSI			
292.4 / 42.4	269.7 / 39.1	10.4	0.0	92

**Chemical Analysis:**

SI	FE	CU	MN	MG	CR	ZN	TI
0.65	0.27	0.26	0.08	0.90	0.07	0.08	0.02

*Signature*

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

R. Petersen, QA Manager Signature Aluminum Canada Inc



**SIGNATURE ALUMINUM CANADA**1850 CLEMENTS RD  
PICKERING, ON L1W 3R8**CERTIFICATE OF COMPLIANCE**

Cert Date	Cert No	Sales Order	Page
04/05/2011	5257945	69112	1
Cast No	B/L No	Lot	Date
13593	000506	800693	04/08/11
Sold To	Ship To		
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, QN K6A 1K7 CANADA		
Item No	Part No	Item Description	Cust Part
002	DAA-897123-1	6061 T6	D2622
Gross Weight	1,177 LBS		
Net Qty	1,146 LBS      126 PCS      2 PKGS		
Specification	Die Desc		
AMS-QQ-A-200/8 & ASTM B221-08			

**Mechanical Tests:**

Tensile	Yield	% Elongation	Conductivity	HREW
MPA / KSI	MPA / KSI			
292.4 / 42.4	269.7 / 39.1	10.4	0.0	92

**Chemical Analysis:**

SI	FE	CU	MN	MG	CR	ZN	TI
0.66	0.28	0.28	0.07	0.91	0.06	0.20	0.02

*8/11/04/04*

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

R. Petersen, QA Manager Signature Aluminum Canada Inc

